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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/718,022

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Eric C. Humphries

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WIGGIN AND DANA LLP
ATTENTION: PATENT DOCKETING
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EXAMINER

ADDIE, RAYMOND W

ART UNIT

PAPER NUMBER

3671

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/718,022	Applicant(s) HUMPHRIES ET AL.	
	Examiner Raymond W. Addie	Art Unit 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-6,8-11,13,15-19,21-23,25, 27-31,33-39 and 41-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,8-11,13,15-19,21-23,25,27-31,33-39 and 41-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 5, 8, 15-18, 21, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rerup et al. # 5,406,039 in view of Underhill et al # 6,016,887 and Oberlander et al. # 5,040,352.

Rerup et al. discloses a traffic noise barrier system for use alongside a roadway comprising:

A longitudinal barrier (26) including: A front, top and back surfaces, see Fig. 6.

A traffic noise barrier wall (28) supported by the longitudinal barrier (26) and spaced apart from the back surface in a direction away from the path of traffic.

Said traffic noise barrier wall (28) further comprising:

A plurality of upstanding posts (50, 70) spaced apart from the back surface of the longitudinal barrier opposite from said path of traffic.

A plurality of panels (29, 30) supported by the plurality of posts (50).

A plurality of load bearing support beams (56) each extending from the

back surface of the longitudinal barrier to one upstanding post in the plurality of upstanding posts for supporting the traffic noise barrier wall.

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Wherein said barrier system (28) further comprises:

A structure, in the form of a plate (52), formed of a rigid material, is disposed across the plurality of transverse beams capable of catching debris that could fall between the longitudinal barrier (26) and the traffic noise barrier wall (28). See Cols. 5-8. Further wherein the upstanding posts (50) are configured to break upon impact by a vehicle. And the barrier wall is capable of being entirely supported by the longitudinal barrier. See Col. 5, ln. 60-col. 6, ln. 13.

What Rerup et al. does not disclose is the use of transversely disposed support beams nor transparent noise panels. However, Underhill et al. teaches it is desirable to support a noise panel assembly (12, 20) a spaced distance away from a typical concrete barrier (18) by disposing a plurality of load bearing, transversely disposed angle beams (22, 24), as illustrated in Fig. 3, to dispose the noise barrier at a desired height above and desired transverse distance behind said concrete barrier. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the noise barrier of Rerup et al., with transversely disposed, load bearing support beams, as taught by Underhill et al., to position the noise barrier in a desired configuration. Further Oberlander et al. teaches noise abatement panels for use adjacent roadways and neighborhoods (see Fig. 6), are advantageously made from fiber (2) infused, transparent acrylic panels (1), that are fragment resistant when impacted by a moving object, such as falling rocks, and road debris.

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Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the noise barrier of Rerup et al. in view of Underhill et al., with a shatter resistant acrylic panel, as taught by Oberlander et al., in order to improve the aesthetic appearance and protect birds from traffic, as reasonably suggested by Oberlander et al., see cols. 1-3.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rerup et al. # 5,406,039 in view of Underhill et al # 6,016,887 and Oberlander et al. # 5,040,352, as put forth with respect to claims 1, 17 and further in view of McKeown et al. # 4,838,524.

Rerup et al. in view of Underhill et al. and Oberlander et al. disclose essentially all that is claimed, as put forth with respect to claim 1 above, but does not disclose the use of a connection bar to interconnect adjacent upstanding posts. However, McKeown et al. teaches it is desirable to provide upper and lower interconnection bars (19, 60) along a noise barrier, in order to interconnect a plurality of upstanding posts (18), to support noise dampening panels (12) in a desired position. McKeown et al. further teaches it is desirable to make noise

barrier panels (12) from a fiber material (50), which absorb rather than reflect traffic noises. See Col. 5, Ins. 29-48. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the noise barrier of Rerup et al. in view of Underhill et al. and Oberlander et al. with a panel assembly, as taught by McKeown et al. in order to facilitate absorption of traffic noises.

3. Claims 6, 19, 20, 22, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rerup et al. # 5,406,039 in view of Underhill et al # 6,016,887 and Oberlander et al. # 5,040,352, as put forth with respect to claims 1, 17 and further in view of Pickett # 4,214,411.

Rerup et al. in view of Underhill et al. and Oberlander et al. disclose essentially all that is claimed, with respect to claim 1 above except for the use of transparent panels. However, Pickett teaches it is well known to form acoustic barriers from transparent sheets (2), mounted between upstanding posts (5), via a cable (8), in order to accommodate shrinkage and expansion of the transparent panel due to temp. fluctuations. See Figs. 4a-4c; cols. 2-3. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the noise barrier of Rerup et al., with a transparent panel assembly, as taught by Pickett, in order to form an aesthetically pleasing sound barrier, as explicitly taught by Pickett, in col. 1, Ins. 7-43.

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4. Claims 9, 10, 19, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rerup et al. # 5,406,039 in view of Underhill et al # 6,016,887 and Oberlander et al. # 5,040,352, as put forth with respect to claims 1, 17 and further in view of Johansson # 6,190,085 B1.

Rerup et al. in view of Underhill et al. and Oberlander et al., discloses essentially all that is claimed, as put forth with respect to claim 1, 17 above, but does not disclose the use of an interconnection tube. However, Johansson teaches a barrier (10, 40) comprising a plurality of upstanding posts (11, 41) interconnected via a segmented tubular bar (16, 44) having at least one cable (22, 52) disposed therein. The tubular bar (16, 44) including a plurality of segments (20, 25) separated by expansion joints capable of allowing relative movement of the segments. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the barrier assembly of Rerup et al. in view of Underhill et al. and Oberlander et al., with an interconnection assembly, as taught by Johansson, in order to provide an impact absorbing safety feature to the barrier assembly, as reasonably suggested by Johansson; See Col. 1, ln. 55-col. 3, ln. 23.

5. Claims 11, 13, 23, 25, 30, 31, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rerup et al. # 5,406,039 in view of Underhill et al # 6,016,887 and Oberlander et al. # 5,040,352, as put forth with respect to claims 1, 17 and further in view of NPL document Guidelines Bridge Rails and Median Barriers dated 2/26/2003, reference to Keller et al.

Rerup et al. in view of Underhill et al. and Oberlander et al., discloses a noise barrier, as put forth with respect to claim 1 above, to include the longitudinal barrier being configured to redirect traffic back towards the roadway and the noise barrier system (28) can be disposed a predetermined distance above the roadway and away from a traffic side of said longitudinal barrier.

However, Keller et al. teaches in Table 2, that concrete New Jersey Safety Shape Bridge rails having a 32" width are common. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made that the longitudinal jersey barriers of Rerup et al. in view of Underhill et al. and Oberlander et al., are at least 32" wide and the noise barrier system (28) could be spaced at least 34" from the front surface of the longitudinal barrier (26).

6. Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rerup et al. # 5,406,039 in view of Underhill et al # 6,016,887, Oberlander et al. # 5,040,352 and NPL document Guidelines Bridge Rails and Median Barriers dated 2/26/2003, reference to Keller et al. as applied to claim 30 above, and further in view of Johansson # 6,190,085 B1.

Rerup et al. in view of Underhill et al. and Oberlander et al., and Keller et al., disclose essentially all that is claimed, as put forth with respect to claim 30 above, but does not disclose the use of an interconnection tube.

However, Johansson teaches a barrier (10, 40) comprising a plurality of breakable, upstanding posts (11, 41) interconnected via a segmented tubular bar (16, 44) having at least one cable (22, 52) disposed therein. The tubular bar (16, 44) including a plurality of segments (20, 25) separated by expansion joints capable of allowing relative movement of the segments.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the barrier assembly of Rerup et al., in view of Keller et al., with an interconnection assembly, as taught by Johansson, in order to provide an impact absorbing safety feature to the barrier assembly, as suggested by Johansson; See Col. 1, ln. 55-col. 3, ln. 23.

7. Claims 37, 41, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pickett # 4,214,411 in view of Underhill et al # 6,016,887. Pickett '411 discloses a traffic noise barrier system for use alongside a roadway comprising:

A longitudinal barrier (6) including: A front, top and back surfaces, configured with flat faces to redirect an errant vehicle, see Fig. 2.

A traffic noise barrier wall (2) supported entirely by the longitudinal barrier (6).

Said traffic noise barrier wall (2) further comprising:

A plurality of upstanding posts (4, 5) configured to break at or adjacent a lower end thereof, upon impact by a vehicle .

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A plurality of transparent panels (29, 30) interconnected to said plurality of upstanding posts (50), via a bar (52).

Although not explicitly disclosed, Pickett clearly illustrates in Fig. 2, the transparent noise barrier (2) extends from the top surface of the longitudinal barrier to any desirable height, relative to anticipated types of traffic i.e. heavy trucks, small commuter cars. What Pickett does not disclose is mounting the noise barrier rearwardly of the barrier, opposite the traffic side of the barrier. However, Underhill et al. teaches it is desirable to support a noise panel assembly (12, 20) a spaced distance away from a typical concrete barrier (18) by disposing a plurality of load bearing, transversely disposed angle beams (22, 24), as illustrated in Fig. 3, to dispose the noise barrier at a desired height above and desired transverse distance behind said concrete barrier. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the noise barrier of Pickett with transversely disposed, load bearing support beams, as taught by Underhill et al., to position the noise barrier in a desired configuration behind the longitudinal barrier such that the noise barrier system (28) can be disposed at least 34" from a front "traffic-side" surface of said longitudinal barrier (26). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to dispose the noise barrier system of Pickett, rearwardly of a Jersey style barrier, as taught by Rerup et al., in order to reduce road debris related damage to the noise barrier system. See Rerup et al. Col. 2, Ins. 36-59.

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8. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pickett # 4,214,411 in view of Underhill et al. # 6,016,887, as applied to claim 37 above, and further in view of McKeown et al. # 4,838,524.

Pickett in view of Underhill et al. discloses essentially all that is claimed, as put forth with respect to claim 37 above, but does not disclose the use of a connection bar to interconnect adjacent upstanding posts. However, McKeown et al. teaches it is desirable to make noise barrier panels (12) from a fiber material (50), which absorb rather than reflect traffic noises, and desirable to provide upper and lower interconnection bars (19, 60) along a noise barrier, in order to interconnect a plurality of upstanding posts (18), to support noise dampening panels (12) in a desired position.. See Col. 5, Ins. 29-48. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the noise barrier of Pickett in view of Underhill et al., with a panel assembly, as taught by McKeown et al. in order to facilitate absorption of traffic noises. See McKeown Cols. 3-4

9. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pickett # 4,214,411 in view of Underhill et al # 6,016,887, as applied to claim 37 above, further in view of and further in view of Johansson # 6,190,085 B1.

Pickett in view of Underhill et al. discloses essentially all that is claimed, as put forth with respect to claim 37 above, but does not disclose the use of an interconnection tube. However, Johansson teaches a barrier (10, 40) comprising a plurality of breakable, upstanding posts (11, 41) interconnected via a

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segmented tubular bar (16, 44) having at least one cable (22, 52) disposed therein. The tubular bar (16, 44) including a plurality of segments (20, 25) separated by expansion joints capable of allowing relative movement of the segments. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the barrier assembly of Pickett in view of Underhill et al., with an interconnection assembly, as taught by Johansson, in order to provide an impact absorbing safety feature to the barrier assembly, as suggested by Johansson; See Col. 1, ln. 55-col. 3, ln. 23.

10. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pickett # 4,214,411 in view of Underhill et al. # 6,016,887, as applied to claim 37 above, and further in view of Rerup et al. # 5,406,039.

Pickett in view of Underhill et al. discloses essentially all that is claimed, as put forth with respect to claim 37 above, but does not disclose the use of a structure for catching debris. However, Rerup et al. teaches it is known to provide a rain directing structure (52a, 52b) capable of catching falling debris falling between the longitudinal barrier and the traffic noise barrier. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the noise barrier of Pickett in view of Underhill et al., with a rain directing structure capable of catching road debris, in order to prevent corrosion of the upstanding posts (50). See Rerup et al., Col. 6.

Response to Arguments

11. Applicant's arguments with respect to claims 1, 4-6, 8-11, 13, 15-19, 21-23, 25, 27-31, 33-39, 41-43 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pickett # 4,529,174 discloses a cable connection system for noise barriers.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond W. Addie whose telephone number is 571 272-6986. The examiner can normally be reached on 6AM-2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571 272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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3/5/06